

fermented and *paséwá*, converted opium, when contained in the contraband article, are to be considered as “foreign matter.” I have been in the habit of regarding them as foreign, when the water exceeded 30 per cent., and when inferiority in quality was palpable; because a different practice would defeat the end, for which the regulation was framed, of securing a fair reward to the informer. Under a less strict interpretation of the rule, he would be tempted to double the weight of the seized opium, and consequently his own reward, by adding to it, a sufficient quantity of water, or of bad opium, such as may at all times be clandestinely purchased for a trifle in the poppy districts.

IV.—*Catalogue of a Second Collection of Fossil Bones presented to the Asiatic Society's Museum by Colonel COLVIN.*

[Exhibited at the Meeting of the 6th April.]

Colonel COLVIN's first dispatch consisted of six large chests of fossil bones, in their rough state, attached to the matrix rock, as they were originally brought in from the hills by the native collectors employed by him to dig. They still remain unclassified in the museum, but the detailed examination that has been given to the second dispatch by Lieutenants DURAND and BAKER, whom experience has already made expert in recognizing fragments, even much mutilated, will materially assist in arranging the former specimens, while it leaves little to be done with the present beyond publishing their catalogue at once for the satisfaction of geologists, and preparing the specimens for the inspection of visitors. There are among them many noble fragments of known animals, which challenge comparison with those of any collection in Europe: these it will be a first object to make known by accurate drawings or by plaster casts. There are also numerous skulls, jaws, teeth, and bones decidedly new to fossil osteology, but the admirable fidelity and scientific knowledge with which the major part of these is now under illustration by Dr. HUGH FALCONER and Captain CAUTLEY, in the Asiatic Researches, from their own, even more extensive, cabinet, supplants the necessity of attempting a full investigation here. All points in which differences from their generic or specific descriptions are recognized, it will be the duty of our curator to bring to notice.

The synopsis published in the Journal for December last, page 706, comprised the varieties of organic remains, up to that period extracted from the upper deposits of the tertiary strata of the *Sivalik* or *Sub-Himálaya* range of hills. Most of the same are to be found in Colonel COLVIN's collection. Some recent additions of a highly interesting

nature have however been made above, of which I have been apprised in my private correspondence with Seháranpur.

Lieutenant DURAND has just dug out a nearly perfect head of a *Palæotherium*, from the vicinity of the spot whence Captain CAUTLEY had previously extracted the *Anoplotherium* of CUVIER. The Dadúpur museum possesses a fragment "of the lower jaw of a huge new animal: the teeth not sufficiently perfect to determine its nature: it is probably of some grand new pachydermatous animal, equalling the elephant in size." Both the rhinoceros and the camel have characters of indubitable variation from known species. Of both these, notices are now in preparation. The acquisition of fossil birds was noticed at the meeting of March: Dr. FALCONER supposes them to be bones of large *Grallæ*. This is, as he says, a fair test of the justice he and his fellow labourers are doing to the enquiry: it is not every museum in Europe that has fossil birds to shew! A note this moment received announces the acquisition of "a superb specimen of gigantic size of an unknown species of crocodile: it forms an intermediate section in the genus between the true crocodile or *magar*, and the *leptorynchus* or *ghariál*. The muzzle is cylindrical, as in the latter, but greatly shorter; and the teeth are thick and shorter, as in the *magar*: they protrude in relief above the jaw three inches, and are 1 inch and 2 lines in diameter!" There is also in Col. COLVIN's collection a Saurian head, apparently new.

I have ventured to alter the numbering of the catalogue, to save repetition, by bringing bones of the same animals together, the original having been written out by Lieutenant BAKER just in the order they came to hand. It will be observed, that great pains have been taken to unite together with cement specimens which were broken in extraction, and in clearing them from matrix. The necessity of the latter operation will be acknowledged on perusal of the following extract from Colonel COLVIN's note to me of the 4th October last. "The quantity I found collected here on my return, and what had to be brought in proved to be so great, that in the matrix they would have loaded a boat; during the rains, therefore, I employed a number of people to clear them, and though a vast number have thus been rejected as superfluous, or too mutilated to be useful, still a great deal has been packed that might perhaps have well been left behind, had I not feared to attempt a selection." The same letter adds:—

"I have been unfortunate in not meeting with specimens of teeth of the *Sivatherium*, or complete heads of the hog. I had one lower end of the radius of what appeared to be the camel, but as a few specimens also deemed "camel" had come into the Dadupur museum*, I made

* Since certified by the discovery of an entire Lead.

over this bone to it with the view of identification, and should the further search prove successful, you will receive specimens of the animal from Lieutenant BAKER.

“The clearing away of the matrix, besides rendering the specimens less cumbrous for transmission, enabled, I should hardly say *us*, for it was my young friend, here to give names to most of what are now sent. The locality of each I found it impossible to particularize, as the parties, whom I sent out to collect, ranged about in the lower hills, picking up whatever they found, and heaping all together, until they had amassed several cart loads; but the eastern limits of their search were the branches of the *Sombe*, which are about due south of the *Chúr* mountain; and to the west, their search extended to about half way between *Náhan* and *Pinjór*. The only distinction worth noticing is, that the hard or brown fossils (those mineralized with hydrated oxide of iron) did not come out of the same stratum as the blue and friable (calcareous) ones; the latter being from the west of *Náhan*. You will perceive the difference of the matrix on several of the specimens only partially cleared. I have never had leisure to visit the sites myself, and would therefore add nothing on this subject until I shall have enjoyed the opportunity of a personal inspection.”

The Society will doubtless be eager to do every honor to the munificent donor of these splendid fossils, if it has any real wish to acquire the reputation of possessing a valuable museum. The foundation of our fossil collection was but laid four years ago, and already through the contributions of Colonel BURNES, Dr. SPILSBURY, Captain SMITH, Mr. DEAN, &c. now enriched by Col. COLVIN's vast store of specimens, it has become necessary to devote an entire apartment to this instructive department of natural history. Our smallest return of gratitude to those who have been at such considerable expence in promoting the Society's interests, will be to do honor to what has been so generously bestowed, by making up fit cabinets to exhibit them to the best advantage, and by spreading the knowledge of them as expeditiously and widely as possible.

J. P. Sec.

Catalogue of Colonel Colvin's Fossil Bones.

MASTODON ELEPHANTOIDES.

- 1 Upper jaw, very perfect.
- 2 ———, fragment.
- 5-6 Lower jaw, part of the right half.
- 7 ———, ditto left half.
- 8 Symphysis of ditto, (or of elephant.)
- 11 to 26 Fragments of molars, of both jaws.
- 31 Axis of a large mastodon (?) very perfect.
- 32 Cubitus, upper extremity, with olecranon.

MASTODON LATIDENS, identified with Elephantoides, FAL.

- 36 Lower jaw, right half.
- ELEPHAS PRIMIGENIUS.
- 41 Upper jaw, right half.
- 42 to 47 Lower jaws, left half, and fragments.
- 48—49 ———, right half.
- 50 ———, left half of a younger animal.
- 51—56 Molars, fragments of.
- 57 59 ———, of smaller animals.
- 60 Upper jaw of a small animal, much mutilated.
- 61 to 80 Tusks, fragments of various sizes.
- 81 Femur, upper and (? mastodon).
- 82—87 ———, lower end.
- 88—91 Humerus, upper end.
- 92—95 ———, lower end.
- 96 Cubitus, upper extremity.
- 97 Tibia, perfect specimen.
- 98—101 ———, upper extremities.
- 102—104 Calcaneum.
- 105 Axis, of very large size.

HIPPOPOTAMUS.

- 111 Cranium.
- 112 Upper half of the head, very perfect in bone.
- 114—117 Upper jaw, perfect, and fragments.
- 119—123 Lower jaw, in various preservation.
- 124 Fragment of ditto, with two central incisors.
- 125—126 Condyles of ditto.
- 127—129 Fragments of molar teeth.
- 130 135 Canine teeth, fragments of upper.
- 136 ———, of lower jaw.
- 140 Pelvis, fragment of the.
- 141—143 Femur, lower extremity.
- 144 Cubitus, upper extremity, with olecranon.

RHINOCEROS.

- 150 Upper jaw, fragment.
- 151—153 Lower jaw, fragments much mutilated.
- 154 Teeth, three fragments of molars.
- 155 Axis, doubtful.
- 156—8 Scapula, three fragments, doubtful.
- 159—163 Humerus, upper extremity.
- 164 ———, lower extremity.
- 165 Cubitus, upper end.
- 166—169 Femur.
- 170 Radius.
- 171 Tibia, with tarsal and metatarsal bones attached.
- 172—175 ———, fragments.
- 176—180 Metatarsal entire.
- 177—179 Metacarpus.
- 180 Calcaneum, perfect.
- 181 Astragalus, perfect.

SUS.

- 182 Right jaw of some animal of this genus.
- Bones of Pachydermatous animals not classified.*
- 185 Lower jaw of a small animal.
- 186 Molar teeth, much mutilated.
- 187—210 Vertebrae, cervical; 191, process of dorsal, 192.
- 212 A very large specimen of do.
- 213—219 Humerus, fragments of lower extremity.

- 220 Femur, upper extremity of.
- 221—223 Condyle of do.
- 224—229 Tibia.
- 230—232 Radius, lower extremity.
- 233—235 Carpus and tarsus.
- 236 Metacarpus, small.
- 237—238 Metatarsus.
- 239—246 Phalanges.
- 247—248 Astragalus.
- 249—250 Omoplate; socket of do. 251—253.
- 251 Pelvis; socket of do. 252.

HORSE.

- 260 Upper jaw, attached to the humerus of a rhinoceros, &c.
- 261—264 Molar teeth.
- 265 Atlas?
- 266 Femur, lower extremity.
- 267 Radius, ditto.
- 268 Cannon bone.
- 269 Astragalus.
- 270—271 Phalanges.

Bos.

- 280 Head of some species of ox.
- 282 Left upper jaw, fragment of.
- 283—289 Lower jaw, fragments.
- 290—293 Molar teeth.
- 294—295 Femur, upper extremity.
- 296—297 Horn, fragments.

ANTELOPE.

- 300 Head and horns, portion of the.
- 301 Occiput.
- 302—303 Upper jaw.
- 304 Lower jaw, or of a small deer?
- 305—306 Posterior part of head, (or of a deer?)

DEER.

- 310 Upper jaw, molars enveloped in matrix.
- 311 Ditto of smaller animal.
- 312 Lower jaw, with metatarsal attached—alone 313, 314.
- 316 Left lower jaw of young animal with milch teeth.
- 317 Posterior molar of large deer: smaller 318.
- 318 Germ tooth (?)
- 319—321 Antlers, fragments of.

Bones of various Ruminants, unidentified.

- 325—326 Cranium with occiput.
- 327 Lower jaw, back part, large animal.
- 328—344 Molars of a large animal, 345.
- 345—358 Cervical vertebræ, small: three connected, 359.
- 360 ———, of a gigantic ruminant. (? *Sivatherium*.)
- 361—364 Dorsal vertebræ.
- 365 Lumbar vertebræ.
- 366—367 Sacral vertebræ.
- 368—372 Very large vertebræ.
- 373 Axis.
- 374—375 Atlas, large, one broken.
- 376—379 Scapula, glenoid cavity of, 380.
- 380—383 Humerus, upper extremity.
- 384—406 ———, lower extremity.
- 407—409 Femur, fragments.
- 410—429 Tibia.

- 430—439 Radius, upper extremity.
 440—449 ———, lower extremity.
 450 ———, with carpal and part of metacarpal.
 451 ———, perfect, with part of ulna, fragments, 452.
 453 Calitus.
 454—466 Carpal and tarsal bones.
 467—527 Metacarpal and metatarsal bones.
 528—537 Astragalus.
 538—551 Calcaneum, very large.
 552—562 Phalanges.
 563 Ribs, fragment of.

HYÆNA.

- 600 Upper jaw, in good preservation.
 601 Canine and 1st molar of do.
 602 Lower jaw, entire, and fragment, 603.
 604 Cranium.
 605 Three molars of some canine animal.
 606 Metatarsal bones of some carnivorous animal.

SAURIAN.

- 700—717 Vertebræ of Saurian reptiles.
 718 Cranium of *Gharial*.
 719—724 Plates of crocodilidæ.

Besides about 120 fragments not identified, received with the second dispatch; the whole of the first donation unregistered, and some gigantic testudinous plates, presented by Col. COLVIN personally while in Calcutta.

GIGANTIC ELK, (presented by Mr. Conductor W. DAWE,) found in the *Ganawer Khúl*, near the *Haripál* branch of the *Sombe* river.

- D 3 4 Portions of the antler.
 D 5 Axis of second cervical vertebra.
 D 6 Cervical vertebra of do.

BUFFALO? presented by the same.

- D 1 Head of bos or buffalo with one horn.
 D 2 Piece of horn, supposed to belong to the same.

V.—Notice of a Visit to the Valley of Kashmír in 1836. By the Baron
 HUGEL.

[Read on the 6th April.]

On my way to Bombay to embark for Europe, I take the liberty of addressing you a few lines, requesting your doing with them what you think best: they relate to my journey to Kashmír. I was in hopes of being able to send you a more elaborate memoir, but my time is very much limited, that I am afraid of postponement, and hasten rather to offer you a few notes as they were collected. I understand that Mr. JACQUEMONT's travels are now published. I think therefore that it may be of some interest to the Indian reading public, to have before it some observations, not influenced by the above mentioned work, made by a traveller a few years later, to compare them together. As